

AMENDMENTS IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A double-row ball bearing with a preload application structure comprising:

an axle, having a small diameter axle portion and a large diameter axle portion;

a sleeve, having a larger inner diameter portion and a smaller inner diameter portion,
surrounding said axle;

at least two rows of bearing balls disposed between said axle and said sleeve;

an inner bearing ring slidably mounted on said axle such that at least one of said rows of bearing balls is set between said inner bearing ring and said sleeve;

a resilient member connected to an external side surface of said inner bearing ring; and

a preload applying member connected to said resilient member;

wherein said preload applying member applies a preload to said inner bearing ring by applying pressure on said resilient member, and

wherein, when an appropriate preload is applied to said inner ring, said preload applying member is fixed to said axle.

2. (Currently Amended) The double-row ball bearing according to claim 1 wherein ~~said axle further comprises a small diameter axle portion and a large diameter axle portion, and wherein~~ said inner bearing ring, said resilient member and said preload applying member are disposed on said small diameter axle portion.

3. (Currently Amended) The double-row ball bearing according to claim 2, wherein said axle further comprises a first ball race formed directly on an outer surface of said large diameter axle part, wherein said sleeve further comprises a ~~first~~second ball race formed directly on an inner surface of said sleeve, and wherein a ~~first~~ row of bearing balls is set between said first ball race of said axle and said ~~first~~second ball race of said sleeve.

4. (Currently Amended) The double-row ball bearing according to claim 2, wherein said inner bearing ring further comprises a first ball race formed on its outer surface, wherein said sleeve further comprises a second ball race formed directly on an inner surface of said sleeve, and wherein a ~~second~~ row of bearing balls is set between said first ball race of said inner bearing ring and said second ball race of said sleeve.

5. (Currently Amended) The double-row ball bearing according to claim ~~2~~1, wherein ~~said sleeve further comprises a larger inner diameter portion and a smaller inner diameter portion; wherein~~ said double-row ball bearing further comprises an outer bearing ring, said outer bearing ring being mounted inside said larger inner diameter portion of said sleeve in an opposing relationship with said inner bearing ring; wherein a first row of said bearing balls is set between a ball race of said large diameter portion of said axle and a ball race of said smaller inner diameter portion of said sleeve; and wherein a second row of bearing balls is set between a ball race of said inner bearing ring and a ball race of said outer bearing ring.

6. (Original) The double-row ball bearing according to claim 1 further comprising an outer bearing ring, wherein said axle further comprises a ball race formed directly on its outer surface,

wherein said outer bearing ring further comprises a ball race formed on its inner surface and wherein a first row of bearing balls is set between said ball race of said axle and said ball race of said outer bearing ring.

7. (Original) The double-row ball bearing according to claim 6, wherein said inner bearing ring further comprises a ball race formed on its outer surface, wherein said sleeve further comprises a ball race formed directly on an inner surface of said sleeve, and wherein a second row of bearing balls is set between said ball race of said inner bearing ring and said ball race of said sleeve.

8. (Original) The double-row ball bearing according to claim 1, wherein said resilient member is a coil spring.

9. (Original) The double-row ball bearing according to claim 1, wherein said resilient member is an undulating spring.

10. (Original) The double-row ball bearing according to claim 1, wherein said resilient member is a rigid spring.

11. (Original) The double-row ball bearing according to claim 1, wherein said resilient member is made of an elastic material.

12. (Original) The double-row ball bearing according to claim 1, wherein said preload applying member is a ring configured to apply pressure on said resilient member.

13. (Original) The double-row ball bearing according to claim 1, wherein said preload applying member is a nut configured to apply pressure on said resilient member.

14. (Original) The double-row ball bearing according to claim 1, wherein said preload applying member is a snap ring configured to apply pressure on said resilient member.

15-28. (Canceled).

29. (Currently Amended) A double-row ball bearing with a preload application structure comprising:

an axle, having a small diameter axle portion and a large diameter axle portion;

a sleeve, having a larger inner diameter portion and a smaller inner diameter portion,

surrounding said axle;

at least two rows of bearing balls disposed between said axle and said sleeve;

an inner bearing ring slidably mounted on said axle such that at least one of said rows of bearing balls is set between said inner bearing ring and said sleeve; and

a preload applying member connected to an external side surface of said inner bearing ring;

wherein said preload applying member applies a preload by applying pressure to said inner bearing ring, and

wherein, when an appropriate preload is applied to said inner bearing ring, said preload applying member is fixed to said axle.

30. (Original) The double-row ball bearing according to claim 29, wherein said preload applying member is a nut configured to apply pressure to said inner bearing ring.

31-34 (Canceled).